

INTRODUCTION

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TRS-80[®]

TRS-80[®]

TRSDOS™-II REFERENCE MANUAL

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About This Manual

This manual shows how you can use TRSDOS-II to:

- . Store, retrieve, or manipulate information on disk
- . Use TRSDOS-II system routines within your own machine-language programs

Terms

Below is a list of terms that we use frequently in this manual. The underlined words represent variable information which you must supply.

<u>command</u>	represents the TRSDOS-II command you want to execute.
<u>comment</u>	is an optional field used to document the purpose of the command line.
{ <u>options</u> }	is a list of one or more parameters that may be needed by the <u>command</u> . Some commands have no options. If you don't use a comment at the end of the command line, you can usually omit the braces { } around options.
parameter	is a variable item of information which customizes a command.
<u>filespec</u>	is a standard TRSDOS-II file specification having the general form: <u>filename/ext.password:drive(disk name)</u>
TO	is a delimiter (separator) which you usually can replace with a space. For example, BACKUP :Ø TO :1 is the same as BACKUP :Ø :1.
hard disk	refers only to a hard disk, Drives 4-7.
diskette	refers only to a floppy diskette, Drives Ø-3.

disk refers to a disk that may be either a hard disk or a floppy diskette. Drives 0-7.

primary drive refers to the disk drive that contains the operating system information, Drive 0 or 4.

RAM (random access memory) is memory storage that can be changed (written to) as well as read.

RAM buffer is an area in RAM for temporary data storage.

Notations

For clarity and brevity, we use some special notations and type styles in this manual.

CAPITALS and punctuation indicate material that you must enter exactly as it appears or material that you see on your computer's video display.

<KEYBOARD CHARACTER>
indicates the key you press.

lower-case underlined
represent words, letters, characters or values you supply.

X'nnnn'
specifies nnnn as a hexadecimal (base 16) number. All other numbers in the text of this manual are in decimal (base 10) form, unless otherwise noted.

About TRSDOS-II

TRSDOS-II (pronounced Triss-Doss Two) is a powerful and easy-to-use disk operating system which provides you with a full set of library commands and utilities. In addition, many of the most useful system routines can be called directly by your machine-language programs.

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Loading TRSDOS-II.

When you install and power up your computer, you see the TRSDOS-II startup logo. This means you are in the TRSDOS-II operating system. You are then prompted to enter the date. Enter the date in the form mm/dd/yyyy. For example, type:

08/25/1982

for August 25, 1982. You are then prompted to enter the time. You can skip this question by simply pressing <ENTER>. The time starts at 00.00.00.

If you want to set the time, type the time in the 24-hour format -- hh.mm.ss. The seconds are optional. For example, type:

14.30 <ENTER>

for 2:30 p.m.

After you enter the date and time, the following prompt is displayed.

TRSDOS-II Ready

.....

This means that you are at the TRSDOS-II command level. At this level you can execute a program, utility, or library command.

Note: To perform any other operation, your system must be under the control of an application program.

If an error occurs while the system is under the control of TRSDOS-II, you receive one of the error messages listed in Appendix B.

If you get an error message not listed, it came from an application program. See the application program manual for an explanation of the error message.

Entering a Command

You may enter a command whenever the TRSDOS-II Ready prompt is displayed. The command can have up to 80 characters.

You must capitalize all letters in a command. Therefore, you may find it convenient to operate the keyboard in the caps mode. The keyboard is in the caps mode when the <CAPS> light is on. Press <CAPS> to turn the light on or off.

When in the caps mode, all alphabet keys are interpreted as capital letters, regardless of whether you press <SHIFT>. (Numeral and symbol keys remain the same.)

End each command by pressing <ENTER>.

For example, type:

CLS <ENTER>

and TRSDOS-II clears the display.

Note: TRSDOS-II allows key-aheads of up to 80 characters. This means you can type in commands while previous ones are being executed. (The key-ahead is not displayed until TRSDOS-II or the application program is ready to interpret it.)

Executing a Program

You can also execute a program (such as SCRIPSIT™ or PROFILE™) at the TRSDOS-II Ready prompt. If what you enter is not a recognized command, TRSDOS-II checks to see if it is the name of a program. It checks for the program file on all the drives, beginning with the primary drive (unless you specify a drive number).

If TRSDOS-II finds a matching program file, it loads and executes the file. Otherwise, you get an error message.

Disk Files

You can keep a record of information you type into your computer by storing it on a disk in a "disk file." A disk file can contain a program, a collection of data, a project report you intend to make, or almost anything you want.

When your computer stores the file, it indexes the file's name and disk location in a special place on the disk called the disk's directory. Whenever you want to access the file, the computer can immediately find its location by using this directory.

Filespec

When you create a disk file, you need to give it a name. The name is just one part of a file specification -- filespec for short.

The filespec is the standard TRSDOS-II format. It contains the following information:

filename/ext.password:drive(disk name)

filename

The name of your file can be any you like; however, do not use the name of a library command or utility. The filename may be typed in lower case. It may be no longer than eight alphanumeric characters; the first character must be a letter. For example, if you want to save a file containing an inventory list, you could name it simply:

INVNTRY

/ext -- extension

If you want to further identify your file, you can give it a second name by adding an extension. An extension is preceded by a slash and has one to three alphanumeric characters. The extension, too, may be typed in lower case.

You can use an extension to provide additional information on a file. For example, using extensions such as /NEW, /IRS, and /PAY, you could distinguish files that have the same name or divide files into categories.

You can also use an extension to indicate the type of file you have. For example, you may wish to use some of the following:

/BAS	for	BASIC programs
/TXT	for	ASCII text
/DAT	for	Data files
/OBJ	for	Object code
/REL	for	Relocatable code
/SRC	for	Source code

If the extension /DAT is added to the inventory name, the filespec becomes:

INVNTRY/DAT

.password

Some files let you protect them. You can give this protection via a password either when creating the file or when using the ATTRIB command.

A password is a sequence of up to eight alphanumeric characters, the first of which must be a letter. A period (.) precedes it as a delimiter. The password may be typed in lower case.

There are two levels of passwords and the protection they provide -- access password and update password. These passwords can inhibit entry to a file. In addition, the access password can provide various levels of protection.

When you create a file and assign a password, the access and update passwords are the same. (If you do not assign a password, eight blanks are used.) Later, if you choose, you can change these passwords by using the ATTRIB command. This provides the additional protection to your files. (See the ATTRIB command for details.)

With the password SESAME, the new filespec of the inventory file is:

INVNTRY/DAT.SESAME

:drive

Often when you use your computer, you'll use more than one disk at a time. To speed the file access, you can specify the number of the drive that contains the file. The drive number is a number from 0-7. It is preceded by a colon.

If you omit the drive number from your filespec, your computer automatically starts looking for the file on all available drives, beginning with the primary drive.

To indicate that your inventory program is located in Drive 2, use the filespec:

INVNTRY/DAT.SESAME:2

Refer to your hardware's owner's manual for information on your drive numbers.

(disk name)

You may want to indicate the name of the disk on which the file is stored. The disk name was assigned when you formatted or backed up the disk.

The disk name is a field of up to eight alphanumeric characters, the first of which is a letter. Parentheses () surround the name. If you specify the disk name, you must also specify the drive number.

By adding the disk name WREHSE to the inventory program, you form the filespec:

INVNTRY/DAT.SESAME:2(WREHSE)

Of course, every filespec you enter won't include all of these optional specifications. However, you can use any combination of the fields as long as you follow the guidelines described above.

Here are more examples of valid TRSDOS-II filespecs:

```
DOPROG.OPEN
CLR/BAS:1
COMPTR:Ø(OPRSYS)
DEPT69/TXT.BOSS:4(PAYROLL)
GAMES:1
THESIS/OLD:2
TEST/CMD
```

Wildcard

Certain commands and supervisor calls (SVCs) let you specify a collection of files by using a "wildcard" mask. An asterisk (*) in a file specification represents a wildcard field and means "any sequence of zero or more characters." For example:

```
*/BAS:1
```

represents all the files stored on the diskette in Drive 1 that have the extension /BAS.

```
D*
```

represents all the files stored on the disk in the primary drive that begin with D and do not have extensions. For example, if you want a directory of all the files that begin with the letter D and have an extension, type:

```
DIR D*/* <ENTER>
```

TRSDOS-II returns a listing of all the files beginning with D and having extensions:

Disk Name:TRSDOS	Drive:4		Ø9/3Ø/82		ØØ.27.18			
File Name	Created	Updated	Atrb	Fil	Rec	# of	----Sectors----	
	MM/DD/YY	MM/DD/YY		Typ	Len	Records	Alloc	Used
DECRPT/BAS	Ø4/28/82	Ø4/28/82	D*XØ	F	256	55	55	55
DATASALE/BAS	Ø4/28/82	Ø4/28/82	D*XØ	F	64	1ØØ	26	25
DANTE/BAS	Ø4/28/82	Ø4/28/82	D*XØ	F	256	39	39	39
DEF/DTA	1Ø/15/8Ø	Ø4/28/82	D*XØ	F	255	12	12	12
DISBRK/CMD	1Ø/3Ø/8Ø	Ø3/Ø3/82	P*XØ	F	256	1	1	1
DIR/EFC	Ø8/14/8Ø	Ø1/29/82	P*XØ	F	256	4	4	4

6 Files Displayed

Super Wildcard

Besides the wildcard (*), TRSDOS-II has a super wildcard (!). You can use it to specify all files, with and without extensions.

For example, you may want to FCOPY from a diskette to hard disk all files, regardless of whether they have extensions. Using the wildcard, you must give two FCOPY commands:

```
FCOPY */*:1 TO 4 <ENTER>
FCOPY *:1 TO 4 <ENTER>
```

The first command copies files with extensions. The second then copies files without extensions.

If, however, you use the super wildcard and type:

```
FCOPY !:1 TO 4 <ENTER>
```

you can do the entire FCOPY in one step. TRSDOS-II copies all Drive 1 files to the hard disk.

You can use the wildcard and super wildcard with these commands:

DIR
FILES
MOVE

FCOPY
KILL

